

Title (en)
HEMOGLOBIN-CONTAINING LIPOSOMES AND PROCESS FOR PREPARING THE SAME

Publication
EP 0170247 A3 19860514 (EN)

Application
EP 85109515 A 19850729

Priority
JP 15928184 A 19840731

Abstract (en)
[origin: EP0170247A2] There are provided hemoglobin-containing liposomes encapsulating within liposomes having membranes comprising a lipid material hemoglobin and a methemoglobin formation-inhibiting agent. The liposomes are used as artificial blood with high oxygen-carrying capacity. As the lipid material of the liposomes are used phospholipid materials such as, for example, lecithin, phosphatidylethanolamine, phosphatidic acid, sphingomyelin and hydrogenation products thereof. As the methemoglobin formation-inhibiting agent are used salts of ascorbic acid, glutathion and the like. The liposomes are prepared by dissolving a liposome membrane-forming lipid material and a surface-active agent, removing the solvent from said solution, adding to the residue a hemoglobin solution to which a methemoglobin formation-inhibiting agent has been added and subjecting the starting solution thus obtained to dialysis with a physiological saline solution containing the same methemoglobin formation-inhibiting agent to remove the surface-active agent from the starting solution.

IPC 1-7
A61K 9/50; **A61K 37/14**; **A61K 31/375**; **A61K 31/195**

IPC 8 full level
A61K 38/16 (2006.01); **A61K 9/127** (2006.01); **A61K 38/42** (2006.01); **A61P 7/08** (2006.01)

CPC (source: EP)
A61K 9/127 (2013.01); **A61K 9/1277** (2013.01); **A61K 38/42** (2013.01); **A61P 7/08** (2017.12)

Citation (search report)
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• [X] CHEMICAL ABSTRACTS, vol. 101, 1984, pages 356-357, no. 36646h, Columbus, Ohio, US; J. SZE BENI et al.: "Oxidative interactions between hemoglobin and membrane lipid. A liposome model", & BIOCHEM. J. 1984, 220 (3), 685-92
• [YP] BIOCHEMISTRY, vol. 24, no. 12, 4th June 1985, pages 2827-2832, American Chemical Society, US; J. SZE BENI et al.: "Encapsulation of hemoglobin in phospholipid liposomes: characterization and stability"

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Designated contracting state (EPC)
BE DE FR GB NL SE

DOCDB simple family (publication)
EP 0170247 A2 19860205; **EP 0170247 A3 19860514**; **EP 0170247 B1 19900926**; DE 3579865 D1 19901031; JP H0474338 B2 19921126; JP S6137735 A 19860222

DOCDB simple family (application)
EP 85109515 A 19850729; DE 3579865 T 19850729; JP 15928184 A 19840731